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ABSTRACT

Although the distribution of income has become more equitable for some groups, inequitable distribution has affected the poor, minorities, and women most adversely. Income inequality and poverty may be attributed to ability differences, education and training, job tastes, property ownership, market power, and discrimination. In economics, the concept of equity and its relevance to employment and education can best be understood through an analysis of two theories of labor markets--the human capital theory and the dual labor market theory. The theory of discrimination is important for human resource development because discrimination has been a major cause of labor market segmentation, inequity, and low incomes. Minorities, women, and other groups will continue to experience severe problems in the labor market in the 1980s. Education has been instrumental in alleviating the economics crisis of the poor, unemployed, and disadvantaged. Unemployment, however, has continued to rise, and some studies show continuing inequality in education. Since 1968 vocational education has had to be more responsive to training the disadvantaged, minorities, and handicapped. Equity programs must be developed to eliminate discrimination in vocational education. Equity considerations should be integrated at all levels of the vocational education system, including planning, administration, and specific programs. (YLB)

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Research and Development Series No. 214B

EQUITY FROM AN ECONOMIC PERSPECTIVE

by Gilbert Cardenas

THE NATIONAL CENTER FOR RESEARCH IN VOCATIONAL EDUCATION

SUMMARY Vocational educators have grappled with equity as a problem and have espoused it as a cause since 1963 when Congress issued both an equity mandate and an equity challenge with the passage of the Vocational Education Act. This paper is one of seventeen reports commissioned by the National Center for Research in Vocational Education to meet the equity challenge through a multidisciplinary approach encompassing three perspectives—academic, vocational education, and special interest group advocacy.

The following paper analyzes various economic concepts with regard to equity and cites major theorists in this area. It also studies the economics of equity as they relate to vocational education through an analysis of the policy implications of equity for the development, planning, and administration of responsive vocational education programs. Of special concern are the barriers that face women, the handicapped, and other minorities in vocational education and employment.

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BACKGROUND

For many years considerable attention has been paid to the socioeconomic problems of the various racial minorities such as blacks, Hispanics, and women. Among the major problems these groups have experienced are high unemployment, poverty, and lower incomes. In recent years, there has also been concern for the economic status of other protected groups such as the older population and the handicapped. Today, as in the past, these groups protected by government laws and regulations continue to experience severe problems in education and unemployment. With the unfavorable economic developments in the country associated with the economic recession, the economic outlook for these groups is likely to worsen in the 1980s. Despite the fact that the educational

attainment of these protected groups has increased, the educational progress of these groups, particularly racial minorities, has been slow. Minorities and women have also experienced serious problems in employment, despite their gains in education. Blacks and Hispanics continue to experience lower earnings and higher unemployment problems than their white counterparts. Similarly, women continue to earn less than men, and the gap has been widening. The economic recession has made it more difficult for the handicapped and for older workers in the job economy. Many of the educational and employment problems of these protected groups are associated with equity, discrimination, and equality. Although the federal government has attempted to alleviate the economic crisis of these protected groups in education and employment (in the form of antidiscrimination laws and regulations under the Civil Rights Act of 1964 and subsequent legislation), its efforts have met with limited success. Discrimination in employment and education in both the private and public sectors continues to be a persistent problem in American society.

This paper analyzes the economics of equity as related to minorities, women, and other protected groups and vocational education. The performance of minorities, women, and the handicapped in employment and education is also assessed. The barriers that these protected groups experience in the labor market are also analyzed. Special consideration will be given to the barriers that these protected groups may experience in vocational education with respect to equity. Moreover, the paper will analyze the policy implications of equity consideration in the development, planning, and administration of a more equitable and responsive vocational education program.

ABOUT THE AUTHOR

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In economics, the concept of equity has been a difficult concept to define. For many years, economists have sought to explain and to reach a common definition of the concept of equity in economics. It is in the nature of this phenomenon that economic equity is easier to recognize than to define. Since the nineteenth century, political economists such as John Stuart Mill have spent a great deal of time searching for principles that could lead to a condition of equity. By the 1940s, economists reluctantly came to the conclusion that there were no economic statements that could be made about equity. By the 1950s, questions of economic equity were not even discussed in basic economics, except to note the necessity of a market economy for just distribution of resources (Thurow 1973). With the social revolution of the sixties and the attendant "rediscovery" of poverty and the civil rights movement, the distributional aspects of equity and equality in America once again became the subject of debate.

The concept of equity has been the cause of more misunderstandings than any other term in economics because economic equity means different things to different people. The concept of equity is often associated with justice and merit. The major problem in defining equity is that there is no universal answer. Another difficulty with the concept of equity is that value judgments play an important role in specifying economic equity. Because of this, the concept of equity may mean different things to different people depending on the values they hold and the ideologies they profess. In the job economy, employers, workers, and government all have different perceptions of the economics of equity.

Despite the problem of defining equity, several contemporary researchers have worked to achieve a better understanding of economic equity. Among the major contributions to the literature of economics has been Rawls' theory of justice. Rawls takes a philosophical approach to the economics of equity in terms of two principles of justice (Rawls 1974). According to Rawls:

1. Each person has an equal right to the most extensive of equal basic liberties compatible with a similar scheme of liberties for all.

2. Social and economic inequalities are to meet two conditions: they must be (a) the greatest expected benefit of the least advantaged members of society (the maximum equity criteria) and (b) attached to offices and positions open to all under conditions of fair equality of opportunity.

According to Rawls' theory of justice, inequality and inequity are similar. In his theoretical formulation, inequality of income and wealth is permitted only when it can be shown to be to the advantage of the members of society lowest down on the economic scale. The basic assumption is equality. If distributing more income to one person than another leads directly or indirectly to increased income for the one

who received less, then the degree of inequality is in fact permissible (Gill 1976).

According to Lester Thurow, who has done extensive work on the economics of equality, poverty, and discrimination, the concept of equity is explained in terms of four elements.

1. Reliance can be placed on process and procedures. An economic game is specified as *fair or equitable* when individuals agree on the rules of the game, and any outcome of the game is thus considered just.

2. Individual preferences can be the key criteria. If the outcome of an economic game is in accordance with the individual preferences of the citizens of a country, the *outcome is equitable.* Equity is achieved when society reaches the distribution of economic resources that generates the most agreement.

3. Merit, however defined, can be used to specify equity. Equity occurs when resources are distributed in the same manner as merit or marginal productivity.

4. Equity can be related to the common good however defined. Equity is that distribution of economic resources that maximizes the common good, whatever it is (Thurow 1973).

Thurow, who has conducted extensive research on the redistribution of income as related to the poor, believes that it is indeed possible to qualify and quantify a definition of what economic equity should be. Government and policymakers can reach an agreement on what may constitute an equitable distribution of resources and income. Equity can thus be defined in terms of any of the above economic considerations.

The concept of equity has also been explained in terms of distributive and market justice. The concept of distributive justice is based on the idea of innate merit; that is, all people are presumed—solely by virtue of their birth and their existence, to merit some share of the total stream of goods and services produced by the economic system (Klevorick 1974). The phrase "from each according to abilities, to each according to needs" also provides an idea of what distributive justice is. According to the theory of distributive justice, some people may believe that all economic goods should be distributed equally among all members of society. Economic goods are goods that are scarce, such as food, clothing, education, and national defense. In this sense, some people may believe that education should be distributed equally among the various groups through equal educational opportunity. To others the idea of distributive justice may mean that innate claims on economic goods ought to be limited to some minimum standard of living, education, and income (Dolan 1980). The terms market justice or "value for

value" are based on the idea of acquired merit. Individuals have no innate claim to a share in the total economic output but merit only whatever share they acquire through production or exchange.

The concept of equity in economics has been used extensively in terms of the distribution of income and resources. Among the goals of equity is to see how fairly an economy distributes its resources and income to its people. In this context, equity is concerned with the unequal distribution of income and wealth (Thurow 1969). Because of the nature of the economic system, there has been an inequitable distribution of income among minorities and women. The pricing structure in our economy does not cater to any set of ethical standards concerning what is an "equitable" or "just" distribution of income. There is a concern, however, for the inequitable distribution of income and resources for minorities, women, and other groups. Extreme inequity for the various protected groups is often seen as unfair. The inequitable distribution of income is indicated by the fact that there is considerable inequality of income or poverty (U.S. Commission on Civil Rights 1978).

In many ways it can be argued that the distribution of income over the years has become more equitable for various groups. Even today, however, the inequitable distribution of income has affected different segments of our society such as the poor, minorities, and women more adversely. In 1978, 12.8 million (22.4 percent) of the total families in the United States received incomes of $25,000 or more. 5.3 million or 9.3 percent of the total 57.2 million families, however, received incomes below $5,000. The inequity in the distribution of income is also noted by the low incomes of blacks and Hispanics. In 1978, about 17.1 percent of all blacks reported incomes above $20,000; about 24.0 percent of the black families reported incomes below $5,000. In the case of the Hispanics, about 15.8 percent reported incomes below $5,000 as compared to 19.3 percent who reported incomes above $20,000. About 7.6 percent of the white families reported incomes below $8,000 and 28.5 percent reported incomes above $20,000. With respect to female heads of households, over 20 percent of the women had incomes below $5,000, and only 8.9 percent reported incomes above $5,000 (U.S. Bureau of Census 1979).

These economic indicators provide a perspective on the extent of the inequality suffered by minorities and women. In 1980, the poor included blacks, Hispanics, women, handicapped, and older workers. In 1964, about one-fifth of the total population was classified as poor. Of the poor, about 22 percent were nonwhite, and one-fourth of all poor families were headed by a woman (Council of Economic Advisors 1964). In 1975, the incidence of poverty had dropped to 12.3 percent; however, the incidence of poverty continues to be high for minorities and female heads of households. Income inequality and poverty may be attributed to specific factors such as ability differences, education and training, job tastes, property

ownership, market power, and discrimination. Because of differences in mental, physical, and aesthetic characteristics, individuals may make contributions to society that command high incomes; others like the poor and minorities may be less fortunate. The extent of income inequality may also be explained by the lack of investment in human capital in terms of education and training. Individuals differ significantly in the amount of education and training they have obtained and hence, in their capacities to earn income. Minorities and women may tend to own few if any material resources. The inequitable distribution of income is also attributed to the lack of market power associated with political power among minorities and the poor. Much of the income inequality is also explained by the economics of discrimination. This concept will be further explained in a later section.

The concept of equity is very much interrelated with the notion of inequality. Equity concepts include issues such as "fair pay, "equal pay for equal work," and "equal reward for equal preparation" (U.S. Commission on Civil Rights 1978). These equity concepts, however, differ significantly from the fundamental equality concept that everyone should have the "same." The concept focuses on the distribution of rewards according to the value of effort, skill, or other criteria, a process that can lead to greater inequality. Income inequity exists if it can be shown that minorities and women who have the same type of job experience, hours of work, and productivity receive different pay. In 1979 the average female worker was as well educated as the average male; both had completed a median of 12.6 years of schooling. The inequities between males and females, however, are illustrated in an analysis of income patterns. For example, fully employed women high school graduates (with no college) had less income on the average than fully employed men who had not completed elementary school—$9,769 and $10,474, respectively (U.S. Department of Labor 1979). Other studies in labor economics have analyzed male-female income differentials and have made conclusive findings on the economics of sex discrimination as related to pay (Oaxaca 1974). Numerous studies have revealed a high degree of similarity and considerable inequity between minority groups and majority males (Levitan, Mangum, and Marshall 1976).

ECONOMIC THEORY AND EQUITY

In economics, the concept of equity and its relevance to employment and education can best be understood through an analysis of two theories of labor markets, namely, the human capital theory and the dual labor market theory. These theories are simply logical extensions of the underlying assumptions about human behavior on which most of modern economic theory is based. According to these assumptions, economic persons are rational, and all their decisions are based on deliberate economic calculations. Human capital theory entails the investment in human capital in terms of education (Becker 1964). Investment in human capital

may consist of general training, on-the-job training, or schooling. The basis for the theory of human capital is that investment in education does pay, and that the rate of return for education is generally positive in terms of earnings. People who invest in education usually experience higher earnings than those who do not.

The theory of human capital extends this concept to equity and the determination of the distribution of income and unemployment. Emphasizing individual choice, this theory concludes that the existing distribution of income and unemployment reflects differences in the level of education and training, which in turn, are the direct results of decisions by individuals whether or not to invest in themselves. The lack of adequate employment and income among minorities is due to their own insufficient investment in human capital. Under this theoretical formulation, the solution to the problems of inequity and inequality lies in the realm of education. Empirical evidence of human capital theory has proved that the level of investment in human capital does increase the level of earnings. The rate of return, however, may vary with respect to the type and length of training. For example, studies have been conducted that illustrate that earnings of persons with a college education are significantly higher than for those persons with a high school degree (Marshall, King, and Briggs 1980). Nevertheless, the rate of return for investment in different kinds of education may be higher for whites rather than for blacks (Harrison 1971; Hanoch 1976). Human capital policies since the sixties in the form of government expenditures such as employment and training, vocational education, and other educational programs have contributed to a general improvement in the educational progress of minorities. In many instances, because of such investments in education, the earnings of blacks, Hispanics, and other minorities have improved. Nevertheless, the rate of return on such investments is generally lower for minorities than for whites. Oftentimes, blacks and Hispanics continue to experience severe employment problems in the labor market despite increased educational attainment.

The dual labor market theory also has special relevance to the concept of equity. The dual labor market formulation views the economy as being conceptually divided into a primary and a secondary sector. The primary sector is characterized by good jobs, high wages, satisfactory working conditions, employment stability, and prospects for promotion. The secondary sector is characterized by bad jobs, low wages, and poor working conditions (Doeringer and Piore 1971). According to this theory, white males are usually employed in the primary sector. Women, teenagers, and minorities in particular, are generally confined to the secondary sector. Because of discrimination in the job market, various groups are relegated to the secondary labor market. The dual labor market theory suggests a more general hypothesis about income determination and distribution in the United States. According to the theory, a variety of social and economic forces has tended over time to produce a dichotomization of the American labor market (Gordon 1972).

The labor market segmentation has contributed to and provides an explanation for the unequal distribution of jobs and income. It also seeks to explain the economic problems of minorities and other groups in terms of poverty and unemployment. Various studies have been conducted to test the validity of this theoretical formulation of local labor markets. Minorities experience severe problems because they are overconcentrated in the secondary labor market. It is indeed difficult for many of these workers to make the transition from the secondary to the primary labor market (Bluestone 1968 and Watchel 1970). Several factors make this transition difficult. First, the behavioral requirements that are imposed on the work force are different in the primary and secondary sectors, particularly in terms of employment stability. Secondary workers are generally banned from primary jobs not because they lack certain skills but because they tend to work unreliably and intermittently. Because of discrimination, employers may dislike employing workers with certain characteristics. The dual labor market analysis usually applies to the employment problems of blacks, Hispanics, and other disadvantaged workers. The dual labor market analysis refers only implicitly to the employment problems of women. Women are much less able than previously "disadvantaged" workers to identify with "advantaged" workers and to follow their model in the transition to stable work. Further, the social definition of the family and sex roles continue to undercut employment stability among women. As the percentage of women in the labor force continues to increase, some employers seem more likely to move many jobs into the secondary market in response to the (expected) behavioral characteristics of secondary women workers (Gordon 1972).

The dual labor market theorists question the potential effectiveness of the role of education in achieving equity between the primary and secondary sectors. Despite the increased educational attainment of the labor force, many workers cannot make the transition from the secondary sectors to the primary sector because of discrimination and other factors. The dualists claim that the types of training necessary for workers to perform satisfactorily in the primary sector are not provided in schools or elsewhere. These kinds of training are only available on the job. In order to acquire this training, the worker first must be hired, and then must be accepted by the workers in the primary sector who will provide on-the-job training assistance (Doeringer and Piore 1971). Within this dual framework, the solution to the problems of equity for minorities, women, and other protected groups lies in the integration of the secondary workers into the primary market. Proponents of the dual labor market hypothesis perceive that economic equity can be achieved through various policy options not limited to massive antidiscrimination legislation enforcement, which focuses on the institutional forces they feel underlie the structure and behavior of the labor market. In particular, they propose policies to eliminate discrimination and restrictive practices that have kept people out of the primary sector, and policies to shift the demand for labor and their jobs from the secondary to the primary sector. The adoption of a long-term,

full employment policy would contribute significantly to the expansion of the number of jobs in the primary sector and could assist secondary workers in making the transition to more stable employment and better wages (Zell 1975).

DISCRIMINATION AND EQUITY

In light of the aforementioned discussion of the human capital and dual labor market theories, it is certain that discrimination plays a vital role in the understanding of economic equity, and its impact on various groups is not limited to minorities. In the last few decades, there has been considerable attention devoted to the issue of discrimination. The focus of this attention has been largely on race and sex discrimination. Because of the nature of discrimination, it is easier to recognize than to define. Discrimination means different things to different people. Everyone seems to understand what is meant by discrimination in ordinary conversation, yet there is no single formal definition which can adequately cover every case (Cardenas and Ellard 1980).

Although the word has a pejorative connotation, discrimination refers literally to any social or economic distinction made between individuals. In this sense, discriminatory decisions and distinctions are made every day. The societal problem is generated by those distinctions that cannot be justified on commonly accepted grounds of equality. In particular, the main concern with discrimination in our individual-oriented society is that individuals are often judged on the basis of their identification with some particular group rather than on individual merits and characteristics.

Some people confuse discrimination and prejudice with morality; they claim public policy cannot legislate morality. The intent of antidiscrimination legislation is not to establish morality. Public policy is designed to prevent the conversion of beliefs (i.e., prejudice) into overt acts (i.e., discrimination). Moreover, through antidiscrimination legislation, prejudice may be reduced as individuals are encouraged to interact. Where actions are, on their face, unjust and violate the constitutional principles upon which this nation was founded, promulgation of such governmental policy is justified.

In economics, the theory of discrimination is important for human resource development because discrimination has been a major cause of labor market segmentation, inequity, and low incomes. Discrimination has resulted in the exclusion of minorities, women, and other workers from certain jobs. It is also prevalent in housing, education, and other sectors. Discrimination in the workplace may be caused by employers, workers, or government. The concept of discrimination by employers may be explained in terms of a matter of taste. If

employers have a taste for discrimination, they must act as if they were willing to pay something either directly or indirectly (in the form of reduced income) to be associated with some persons instead of others (Becker 1957). The economics of discrimination may also result from white employers acting as discriminating monopolists. By virtue of their monopolistic power, they establish hierarchical relationships with both economic and social dimensions in which blacks occupy jobs that are inferior to those held by whites (Thurow 1969). Discrimination may also be caused by employee preferences for working with members of their own race (Welch 1967). Arrow rationalizes employers' discriminatory actions based on reality. If employers believe that black workers are less productive than white workers, employers will hire white workers (Arrow 1972). Discrimination may also entail unequal treatment of persons on the basis of race, sex, age, or handicaps. In this sense discrimination may result in restricting employment, earnings, and educational opportunities for minorities, women, or the handicapped compared to others of similar productiveness. Employers, government entities, and unions may discriminate and prefer whites over blacks of equal abilities; similarly they may prefer men over women of equal abilities. Minorities and women may be forced to accept lower wages or less attractive jobs. Because of discrimination, equity and equality become more difficult to achieve among minorities, women, and other groups in both the public and private sectors.

Discrimination affecting minorities, women, the handicapped, and other protected groups may be of various types: wage, occupational, employment, and human capital discrimination. For example, wage discrimination occurs when blacks and other minority workers are paid less than whites for doing the same work. Employment discrimination is associated with equal access to employment opportunities for minorities, women, and others. Employment discrimination in the public and private sectors may occur in the recruitment, hiring, and placement of workers on respective jobs (Doeringer and Piore 1971). Occupational discrimination exists when blacks, Hispanics, and women have been arbitrarily restricted or prohibited from entering the more desirable, higher paying occupations in the primary sector. For many years, blacks and Hispanics have been overrepresented in blue collar occupations rather than in white collar occupations relative to their representation in the work force (Cardenas 1980). In the case of human capital discrimination, the extent of investment in education and training has been relatively higher for whites than for blacks as shown in the human capital analysis. Moreover, the rate of return to education for blacks has been much lower than for whites. The lack of adequate investment in human capital and the low rate of return have contributed to many of the employment and earnings problems of minority workers. In the contemporary setting, the experiences of minorities, women, and the handicapped with respect to employment discrimination vary from group to group. Different groups continue to experience different types of discrimination.

The prevalence of discrimination in the labor market has made it more difficult for these groups to achieve economic equity in terms of employment and income.

PATTERNS OF EMPLOYMENT IN THE 1980s

Minorities, women, and other groups will continue to experience severe problems in the labor market in the 1980s. Many of their problems are associated with the unfavorable state of the economy. Factors such as the lack of investment in human capital, discrimination, and general attitudes toward the world of work have made it more difficult for these groups to achieve economic equity. The underutilization of the human resource potential of blacks, Hispanics, women, the handicapped, and older workers may create further imbalance in the distribution of income in the future. Because of these equity considerations, it is important to assess the economic progress of these groups relative to the state of the labor market.

Women today represent an integral part of the labor force. Women have accounted for three of every five additions to the labor force in the past twenty-five years. Unlike men, women have varied work life expectancies, depending on whether they stay single, marry, give birth to children, or become heads of households. Marriage and the presence of children tend to curtail employment for women, while divorce and the decrease of family responsibilities tend to bring women back into the labor force. The labor force participation rate for women has increased significantly in recent times. In 1970, women represented 36.7 percent of the labor force; by 1979, women represented about 42.2 percent of the labor force. The labor force participation rate for women has increased from 43.3 percent in 1970 to 50.0 percent in 1978 (U.S. Department of Labor 1979). Women continue to experience higher unemployment rates than men. In 1978, the unemployment rate was 7.2 percent as compared to 5.2 percent for males. The rate of joblessness was significantly higher for blacks (13.4 percent) and Hispanic women (10.5 percent). With respect to occupational categories, women continue to be overrepresented in white collar occupations, particularly clerical occupations. In 1978, 63.2 percent of the women in the labor force worked in white collar occupations, as compared to 40.8 percent of the men in similar occupations. For the same year, only 14.8 percent of the women in the labor force were in blue collar occupations such as operatives and laborers; this compares to 46.4 percent of the men in similar occupations (U.S. Department of Labor 1979). In terms of income, women earn considerably less than men. *In 1977, the median earnings of women were $14,626 as compared to $18,618 for men;* thus real earnings for women in 1977 represented only 58.9 percent of the earnings of men. In 1976, the median earnings of women ($8,099) represented 60.2 percent of men's earnings ($13,455). Employment problems are even more severe for women heads of households. In 1977, the

median income of families whose head of household was a woman approximated $7,770 or 44 percent of the $17,720 total for husband-wife families (U.S. Bureau of the Census 1979).

The increased labor force participation of women is attributable to numerous factors. The rising wage rates and expanding job opportunities that have accompanied economic growth have provided obvious economic incentives for women to seek paid employment. Many women have also entered the labor force to supplement family income because of economic necessity. Like men, women have been acquiring more education, therefore increasing their productivity and earnings. Women have also come in to the labor force because of changes in attitudes toward child rearing as well as in their attitudes toward the world of work. Despite the greatly increased labor force participation of women since 1950 and their changing work patterns, women are far from achieving equality in terms of occupational status. The earnings differential between men and women has remained substantial over the last two decades, and women are still concentrated in the lower paid, traditionally female occupations and industries. The separation and categorization of the labor force into male and female jobs help explain the significant differences in the earnings of men and women. Yet large differences persist, even when job classification, years of school completed, and other variables are held constant (Kreps 1971). Moreover, women continue to experience serious problems of unemployment, poverty, and discrimination.

The employment problems of blacks and Hispanics continue to worsen in many ways. In many instances, the equal employment opportunity gains made in the sixties have been diminished in the seventies. Unemployment continues to be significantly high among blacks and Hispanics, particularly among the youth population. The average annual unemployment rate for blacks and Hispanics in 1979 was 12.2 percent and 8.3 percent respectively. Unemployment was significantly higher for black and Hispanic youths. The average annual unemployment rate for black youths in 1979 was 28.2 percent as compared to 19.1 percent for Hispanic youths. The unemployment rate for Puerto Rican youths in 1979 of 27.8 percent was nearly as high as that of black youths (Cardenas 1979).

Hispanics experienced slightly higher labor force participation rates than blacks but lower than whites. In 1978, the labor force participation rate was 62.9 percent for Hispanics, as compared to 61.4 percent for blacks and 63.4 percent for whites. Both blacks and Hispanics are overrepresented in blue collar and service occupations. In 1978, about 46.6 percent of the Hispanic workers were in blue collar occupations as compared to 32.4 percent in white collar occupations. Similarly, about 39 percent of the black workers were in blue collar occupations as compared to 33.5 percent in white collar occupations. About 10 percent of the black workers and 7.5 percent of the Hispanic workers were in professional

occupations, as compared to 15.1 percent for whites. More than one-fourth of all black workers and 15.3 percent of all Hispanics worked in service occupations (U.S. Department of Labor 1979).

In terms of income, blacks and Hispanics continue to earn lower incomes than whites. In 1977, the median family income for blacks was $9,653 compared to $11,421 for Hispanics. White median family income was $16,750. Hispanic median family income represented 68 percent of the median white family income. The median earnings for black men and women were $10,445 and $8,097 respectively. Median earnings for Hispanic men and women were $10,798 and $7,516 respectively (U.S. Bureau of Census 1979).

Both blacks and Hispanics continue to experience severe employment barriers. Institutional discrimination is a major problem for both blacks and Hispanics. The lack of adequate labor force skills and educational attainment make it more difficult for minorities to compete in the labor market. The educational problems of Hispanics are further compounded by the language barrier. The current state of the economy relative to the lack of aggregate demand has made it more difficult for minorities to compete with other workers in the labor market.

EQUITY IN VOCATIONAL EDUCATION

Since the sixties, education has been instrumental in alleviating the economic crisis of the poor, the unemployed, and the disadvantaged and in bringing them into the mainstream of society. In many ways educational programs have been designed to help minorities to achieve economic equity and employability. Moreover, the evidence from the human capital school seems to indicate that more educated workers on the average have higher incomes and experience less unemployment. Since the level of educational attainment has risen from 9.1 years in 1940 to 12.5 years in 1973, one might have expected a corresponding decrease in the level of unemployment. The rate of unemployment, however, particularly for teenagers, has increased significantly. Moreover, it has been argued that the schools have done little or nothing for equality and that we might be better off without it. Some studies have shown that further increases in government expenditures for education have had no effect on the desired equality (Jencks 1972). Similarly, other studies have shown that inequality in education continues. The Coleman Report demonstrated that family influence was a more powerful factor than the quality of schooling. Others have claimed that education has become a formalized credentialing procedure that acts as a barrier to the advancement of the poor (Berg 1970). The educational system has also been found guilty of an inverse distribution of income (Hansen and Weisbrod 1969).

Equity and inequality considerations also have special relevance for vocational education. There has been concern expressed about the inequitable distribution of government expenditures in vocational education. Since 1968, the vocational education system has had to be more responsive to training the disadvantaged, minorities, and the physically and mentally handicapped. Vocational eduation itself has been concerned about the returns to vocational education. In general, available studies have supported the usefulness of the additional investment in vocational education (Levitan, Mangum, and Marshall 1976). Vocational education has increased the earnings and employability of minorities and women. Because of vocational education, many minorities, women, and the handicapped have been able to find good jobs in the primary sector.

Minorities, women, and the handicapped have found entry to vocational education much easier than to other educational programs. In 1979, white enrollments in occupational education comprised 67 percent of the total vocational enrollments. Blacks comprised 18 percent, and Hispanics comprised slightly more than 6 percent (National Center for Education Statistics 1980). Blacks and Hispanics have experienced higher participation rates than whites in trade and industrial education and lower rates in the health occupations programs. Both blacks and Hispanics were underrepresented in agribusiness, marketing, and technical occupations. Blacks and Hispanics are overrepresented in adult education programs. The physically and mentally handicapped represented about 4 percent of all vocational enrollments. With respect to sex equity, women have been fairly equally represented in the respective vocational programs. In adult education programs, about 55 percent of the adult enrollments were women. In the occupational programs, women continue to be overrepesented in the traditional clerical programs such as business and office occupations (National Center for Education Statistics 1980).

Equity in vocational education is associated with the development of an equitable distribution of vocational education resources and services to minorities, women, and handicapped persons. Vocational education equity programs must be designed to meet the special needs of these groups. Equity programs must be developed to eliminate discrimination in vocational education. Under Title VI of the Civil Rights Act of 1964, discrimination is prohibited in federally assisted programs on the grounds of race, color, or national origin. Under the law no person should be excluded from participation in, be denied the benefits of, or be subjected to discrimination in any program or activity receiving federal financial assistance. In the fifteen years since Title VI was enacted, its mandate of equal justice on the basis of race, color, or national origin has been extended to other groups, including women (Title IX of the Education Amendments of 1972), the handicapped (Rehabilitation Act of 1973), and selected age groups (Age Discrimination Act of

1975). The nondiscrimination statutes apply to vocational education programs as well.

Federal regulations implementing the nondiscrimination mandate of Title VI are clear and apply to vocational education. Any difference in the quality, quantity, or manner in which service or benefits are provided to the various groups may be discriminatory. Discriminatory actions in vocational education may entail restriction of minorities, women, and handicapped persons from membership on advisory or planning councils. Failure to provide information or services in languages other than English where a significant number of potential beneficiaries are of limited English-speaking ability may also entail discriminatory actions. The separate treatment in any manner related to receiving services or benefits may also be construed as discriminatory.

Discrimination in vocational education includes but is not limited to (1) disparate treatment, (2) adverse impact, (3) race or gender related activity, and (4) systemic discrimination. Disparate treatment focuses on treatment that is unequal. Disparate treatment in vocational education may occur if whites and minorities, applying for the same program or benefit, are treated in an unequal fashion. Adverse impact occurs when allegedly uniformly applied standards and procedures are unequal in their effect. Where one group is affected more adversely than another, and this disparate effect cannot be justified by other causes, it can be deemed an "adverse impact." Discrimination may exist where an individual is adversely affected as a consequence of a "race or gender related activity" based on appearance, beliefs, or reactions that appear to be sexist or racist. With respect to systemic discrimination, equal opportunities may be denied through the inevitable consequences of some established operational practice or procedure, persisting over time, rather than through a specific overt action against an aggrieved party (Cardenas and Ellard 1980).

Discrimination and inequity in vocational education may occur in the delivery of services provided for minorities, women, and the handicapped. These problems may exist in various functions of the delivery system such as intake, recruitment, training, placement, and support services within the vocational education system. Some groups may receive different support services than other groups. Discrimination and inequity may result in the inadequate representation of minorities, women, and handicapped individuals on vocational education staffs and planning councils. In vocational education, inequities may also exist if minorities are overrepresented in certain occupations and underrepresented in others. For example, women entering vocational education should be equitably represented across programs and not be limited to the clerical and health occupations. Discrimination and inequity may also exist in planning vocational education programs, if the vocational plans do not reflect the special needs of the various

target groups. Discrimination may also occur in the placement of vocational education students on jobs. The effects of discrimination in vocational education may make it more difficult for minorities and women to achieve equity. The lack of equity will make it more difficult for vocational graduates to find suitable employment in the present job economy. Unsuccessful equity programs can only contribute to the worsening of the economic plight of minorities, women, and handicapped persons in terms of high unemployment, low incomes, and poverty.

POLICY IMPLICATIONS

The economics of equity have significant policy implications for the present and future of vocational education. An inequitable system of vocational education will have severe implications for minorities, women, and handicapped persons. With the present state of the economy, it is most important to integrate fully equity considerations, both in theory and in practice, in vocational education systems. Equity considerations should be effected at all levels of the vocational education system including planning, administration, and specific programs.

There is a need to develop viable programs for promoting equity in vocational education at the federal, state, and local levels. Compliance efforts and affirmative action should be monitored periodically to ensure equal opportunity and equity in programs. There is a need to ensure that minorities, women, and the handicapped are included in the policymaking and administration of vocational education systems. Efforts should be made to include adequate representation of these groups on advisory councils and staffs of vocational education. Vocational educators should ensure that target groups receive the services and training needed for better preparation for the world of work. Minorities, women, and handicapped persons should be fairly represented in the respective adult and occupational programs and trades. Special technical assistance should be provided to vocational education staffs in the formulation, development, and implementation of equity programs. Efforts should be made to educate planners, educators, administrators, and other staff as to how the concept of equity is related to vocational education. There is a need for vocational educators and the public at all levels to understand the benefits to be gained from developing successful equity programs for various groups.

Equity considerations will contribute to a more responsive vocational educational system. In the decade of the 1980s, vocational education will become of utmost importance to minorities, women, and other workers. The development of a more equitable system of vocational education can result in the maximum utilization of resources and individuals in preparation for the world of work. With few exceptions, the labor force participation rate of minorities, women, and other

groups is likely to increase. These groups should experience gains in employment and earnings. Because of these trends, the demand for vocational education for these groups will also increase. Equity considerations in vocational education will become of major significance to the economic progress of these groups and can be most instrumental in improving economic equity and the distribution of income in America.

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ACKNOWLEDGMENTS

Before vocational educators can adequately meet the special needs of special groups, they must be committed to a philosophy of equitable education. The issue of equity in education has received a great deal of attention over the last ten years from the legislative, judicial, and academic sectors. As a result of this attention, research and analysis have shown that the term "equity" has a different connotation for nearly everyone who has attempted to define and apply it to educational programs. In addition, a host of related terms such as equality, disparity, and discrimination are a part of the vocational educator's daily vocabulary.

In an attempt to help vocational educators to articulate a definition of equity, the National Center for Research in Vocational Education has commissioned seventeen papers on equity from three broad perspectives—academic, vocational, and special needs. The authors in each of the three groups provide their own perceptions of and experiences with equity in education to bring vocational educators to a better understanding of this complex but timely issue.

The National Center is indebted to these seventeen authors for their contribution to furthering research on equity in vocational education.

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